Revised mandate for the Task Force and the Programme Centre of the International Cooperative Programme on Assessment and Monitoring of the Effects of Air Pollution on Rivers and Lakes

1. The current terms of reference (mandates) for International Cooperative Programmes (ICPs) and the Task Force on the Health Aspects of Air Pollution had been specified in document *Future Development of Effects-Oriented Activities* (EB.AIR/WG.1/2000/4, Annexes II-VIII) approved by the Working Group on Effects (WGE) and the Executive Body in 2000. The mandates need to be revised and updated to make them consistent with the current provisions and priorities of the Convention and of WGE set in the following documents:

(a) Long-term Strategy for the Convention on Long-range Transboundary Air Pollution (ECE/EB.AIR/106/Add.1);

(b) The 2016 scientific assessment of the Convention;[1]

(c) Policy response to the 2016 scientific assessment of the Convention (ECE/EB.AIR/WG.5/2017/3, ECE/EB.AIR/WG.5/2017/3/Corr.1 and ECE/EB.AIR/2017/4 forthcoming);

(d) Guidelines for reporting on the monitoring and modelling of air pollution effects (ECE/EB.AIR/2008/11, ECE/EB.AIR/WG.1/2008/16/Rev.); and

(e) Draft 2018-2019 workplan for the implementation of the Convention (ECE/EB.AIR/2017/1, forthcoming).

The revised mandates will include key objectives and functions of the task forces and centres. The mandates are expected to be in force for the next 5 to 10 years. Specific activities and related deliverables on a shorter timeframe will be included in the bi-annual workplans for the implementation of the Convention.

2. Highlights of achievements of the Task Force and Programme Centre of the International Cooperative Programme for assessment and monitoring of the effects of air pollution on rivers and lakes (ICP Waters) are:

(a) The maintenance of a regionally extensive database on water chemistry and biology (aquatic macro-invertebrates) in areas in Europe and North America, that are sensitive to air pollution;

(b) Developing and maintaining high data quality standards by developing and adhering to a manual of recommended methods, as well as undertaking an annual inter-calibration of chemical analyses and biological classifications;

(c) Documentation of widespread biological and chemical recovery of acid-sensitive waters as a response to reduced emissions of sulphur and nitrogen, through the periodic trend assessments in water chemistry and biology, providing evidence that air pollution policy has its intended effect, but also highlighting that many sensitive surface waters remain acidified;

[1] See Rob Maas and Peringe Grennfelt, eds., *Towards Cleaner Air: Scientific Assessment Report 2016* (Oslo, 2016) and United States Environmental Protection Agency and Environment and Climate Change Canada, *Towards Cleaner Air: Scientific Assessment Report 2016 – North America* (2016, online report).

(d) Documentation of increased aquatic biodiversity as a result of reduced sulphur emissions;

(e) Documentation of mercury in fish in northern, boreal lakes, at levels that exceed limits advised for human consumption; for lakes that are impacted by air pollution there is so far little evidence that levels of mercury in fish are declining, implying that mercury pollution remains a concern;

(f) Evidence that climate change may present a delay for chemical and biological recovery of surface waters.

Annex

Revised mandate for the Programme Centre of the International Cooperative Programme on Assessment and Monitoring of the Effects of Air Pollution on Rivers and Lakes (ICP Waters).

1. The Programme Centre (located at the Norwegian Institute for Water Research, Oslo) hosted by Norway, will be responsible for the detailed planning and coordination of the Programme.

2. The Centre will assume principal responsibility for coordinating the relevant activities under ICP Waters including development of technical projects, provision of deliverables according to the workplan (including annual reports and access to all relevant information and data), participation in the relevant task force meetings, organizing technical workshops and training workshops, and providing communication with and direct support to Parties.

3. The Centre will be responsible for the production and the provision of all information and data on air pollution impacts on surface waters, necessary for the implementation of the Convention and its Protocols by the Parties.

4. The Centre will report on its activities and deliverables to WGE and to other bodies of the Convention as needed.

5. Specific scientific and technical activities developed by the Centre should be discussed and approved by WGE and be included in the biannual workplan.

6. The functions of the Centre will be to:

(a) Plan and conduct its technical work to assess, using monitoring data and other sources of scientific evidence, i) the degree and geographic extent of the impact of atmospheric pollution, in particular acidification, on surface water chemistry and biology – including biodiversity-, and assess temporal trends and spatial patterns; ii) spatial patterns and temporal trends of heavy metals, most importantly mercury, in aquatic ecosystems, related to atmospheric pollution, iii) the impact of persistent organic pollutants in aquatic ecosystems, related to atmospheric pollution; iv) the impact of confounding factors relating to air pollution impacts on surface waters such as climate, climate change and land-use;

(b) Contribute to i) assess air pollution impacts on aquatic ecosystems through collating and reviewing scientific literature; ii) update the *Manual on Methodologies and Criteria for Modelling and Mapping Critical Loads and Levels and Air Pollution Effects, Risks and Trends*[2] and associate background documents with the latest relevant scientific knowledge;

[2] A first version of the Mapping Manual was published in 1993. It has since been updated three times: in 1996, 2004 and again in 2016. The full text of the 2016 version is available as online, by chapter, from the website of the International Cooperative Programme on Modelling and Mapping of Critical

(c) Promote international harmonization of monitoring practices by i) maintaining and updating a manual for methods and operation, ii) conducting an annual chemical intercomparison and an annual biological intercalibration, ii) and compile a centralised database with data quality control and assessment capabilities;

(d) Support the Parties with the further development and implementation of methodologies described under (a) and (b), including requirements of the new European Union National Emissions Ceilings Directive (Directive (EU) 2016/2284); organise the annual Task Force meeting and invite Parties to attend, present their work related to the programme, and contribute to discussions and new developments;

(e) Support and encourage participation of countries in Eastern Europe, Caucasus and Central Asia in meetings and activities of the Task Force;

(f) Collaborate with i) ICP on Integrated Monitoring of Air Pollution Effects on Ecosystems (ICP Integrated Monitoring) on organisation of meetings, and on assessing air pollution impacts on surface waters; ii) other bodies under the Convention (ICP on Modelling and Mapping of Critical Levels and Loads and Air Pollution Effects, Risks and Trends (ICP Modelling and Mapping), Coordination Centre for Effects, the Meteorological Synthesizing Centre-West) on thematic reports defined in the workplan;

(g) Collaborate with external partners, in particular, with the United Nations Environment Convention on Mercury (Minamata Convention) and the Arctic Monitoring and Assessment Programme of the Arctic Council on issues of common interest;

(h) Carry out other tasks assigned to it by WGE and the Executive Body.

Levels and Loads and Air Pollution Effects, Risks and Trends: http://icpmapping.org/Latest_update_Mapping_Manual.